

connecting.canadians

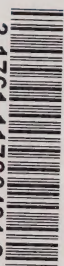
# SchoolNet

FALL  
2000

MAGAZINE MAKING A DIFFERENCE WITH ICT

CAI  
IST  
- S14

3 1761 41766-318





# SchoolNet

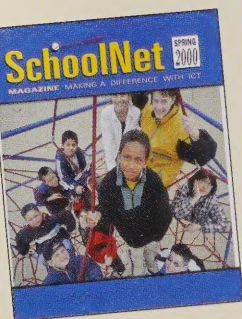
connecting Canadians

FALL ISSUE

MAGAZINE

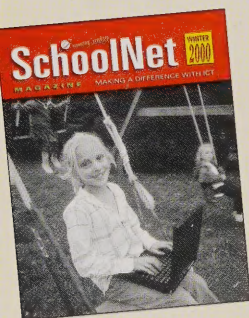
*Making a Difference With ICT*

## We are Listening!



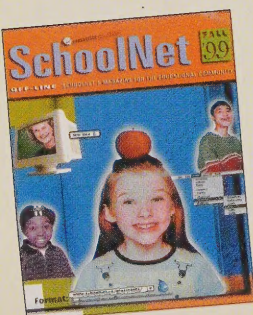
Since 1995, **SchoolNet Magazine** has been showcasing how Canadian teachers and schools are successfully integrating the Internet, multimedia and software applications – what we call information and communication technologies (ICT) – in their classrooms and teaching methods.

The objective of **SchoolNet Magazine** is to help teachers use ICT in their classrooms by providing examples of what other teachers are doing—what new technologies are available, how they are being used, what works and what doesn't and, of course, what the value is to students. We also want to let teachers and educators know the latest news about the activities, events and services SchoolNet offers with our partners.



We recently surveyed teachers across Canada to find out what they thought of **SchoolNet Magazine**. Teachers said that **SchoolNet Magazine** is a valuable teaching tool: it gives them new teaching ideas and motivates and helps them to use the Internet in their classrooms. A suggestion for improvement is to provide greater detail on how teachers can replicate the projects in their own schools and classrooms.

So, in the next issue you will find more detailed articles including the necessary steps on how to start and complete Internet-based classroom projects. We will also showcase regular sections on great Canadian web resources, new connectivity solutions for teachers, professional development models, research on, and the social implications of, ICT and learning.



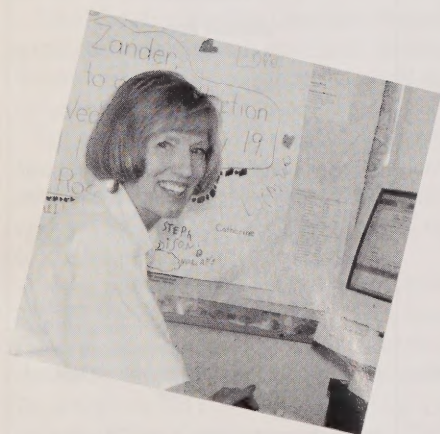
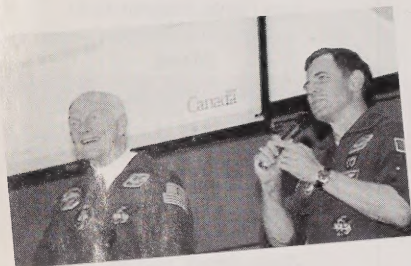
Watch for the Winter 2001 issue of **SchoolNet Magazine**, designed just for YOU!

We appreciate your feedback: call 1 800 575-9200;  
fax: (613) 941-1296; or e-mail: [schoolnet@ic.gc.ca](mailto:schoolnet@ic.gc.ca) to let us know what you think of the new **SchoolNet Magazine**.



# CONTENTS

## *In This Issue*



- 5** Communities@ca Winners Share Their Towns with the World  
*by Jitka Licenik*
- 6** *St. Roch II*: Recreation of the Original Voyage
- 7** BADLAB: Expanding the Learning Spectrum  
*by Tanya Sewell*
- 8** Search On for More Innovative Schools
- 9** Hurley Island Project: the Changing Face of Education  
*by Isabelle Poitras*
- 9** Taking Canada to the World
- 10** SchoolNet Crosses the Globe  
*by Angie Rumpf*
- 12** Young Canadians Bring Wired World to Developing Countries  
*by Isabelle Poitras*
- 13** Explore Canada's First Nations
- 14** Students Embrace Space with SchoolNet  
*by Jason Gadoury*
- 14** I Have a Dream
- 15** A Year of GrassRoots  
*by Isabelle Poitras*
- 16** Spotlight on GrassRoots: New Investor, New Projects  
*by Jean Tessier*
- 17** Fireworks Safety Explodes onto SchoolNet
- 17** Best on the Net
- 19** Coin Recognizes Canada's Cultural Diversity
- 19** Microsoft Supports GrassRoots Winners
- 20** Free Computers for Schools
- 20** www.schoolnet.ca's New Look
- 22** SchoolNet's Online Educators' Forums—An Excellent Way to Interact!
- 22** Linking Seniors and Youth

Cover Photo by John Hryniuk Photography



Our fall issue is all about impact—about the impact information and communication technologies (ICT) are having on student learning, about the impact students with ICT skills are having on the world, about the impact of bringing the world into learning.

Let's start with the article on how students are using their ICT-enhanced skills to make an impact around the world. By sharing their new expertise, young volunteers with NetCorps Canada International are helping people in countries looking to develop information technology infrastructure and training. These countries benefit as do the NetCorps volunteers. The students come back greatly enriched by the people and cultures they have helped. As one veteran pointed out, knowing you can put your skills to immediate use to help people in other cultures is a powerful incentive to work hard and do well in school.

Then there is the article about the impact of Canada's SchoolNet in other countries. Many nations look at what we in Canada have created together using ICT, and they want to do the same. They see SchoolNet as a successful model, a network of networks for bringing people together from all walks of life to build something that reflects their own culture.

Finally, we have several articles about virtual learning. At the heart of this topic is John Spence's seminal work at the Communications Research Centre in Ottawa to design VirtualClassroom, a project using broadband multimedia technology to affordably link schools. Suddenly, it is possible for students anywhere in the country, or even around the world, to come together to learn. In one of the articles, students who have used VirtualClassroom discuss its effectiveness as a learning and communications tool. Another article describes an electronic forum in which students and astronauts came together to talk about space. Learning comes alive when students can see, hear and interact with today's thinkers, doers and creators.

So, what does all this mean? Has ICT shown its effectiveness in enhancing learning?

Well, many still sing the familiar chorus of "the jury is still out." But, I think it's time we looked at the changes ICT has already made in our classrooms: the impact of the word processor on children's writing, for instance, or the impact of the Web on their research skills. Just ask the students!

Doug Walker, Editor  
walker.doug@ic.gc.ca

# SchoolNet

## MAGAZINE

PUBLISHER

*Wili Liberman*

Editor

*Doug Walker*

Associate Editors

*Beth Clarke, Natacha Audet*

Editing

*Whitehall Associates*

Contributing Writers

*Jason Gadoury, Jitka Licenik,*

*Isabelle Poitras, Angie Rumpf,*

*Tanya Sewell, Jean Tessier*

Project Co-ordinator

*Lyne Martin*

Art Director

*Vinicio Scarci*

Production

*Jennifer Roberts*

Advertising Manager

*Wili Liberman*

SchoolNet Magazine is published by Industry Canada/SchoolNet and Quadrant Educational Media Services Inc., Publisher of TEACH Magazine.

© Her Majesty the Queen in Right of Canada (Industry Canada) 2000

No authorization is required to reproduce, store in a retrieval system or transmit in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), provided that the reproduction is accurate and not sold, and that acknowledgement of the source work and Industry Canada as author is included.

ISSN: 1206-0062

For more information, please contact SchoolNet at 1 800 575-9200, by fax: 613-941-1296 or by email: [schoolnet@ic.gc.ca](mailto:schoolnet@ic.gc.ca), or visit the website at [www.schoolnet.ca](http://www.schoolnet.ca) and [www.schoolnet.ca/magazine](http://www.schoolnet.ca/magazine)



Government of Canada

Gouvernement du Canada

Canada







## Communities@ca Winners Share Their Towns with the World

by Jitka Licenik

**T**here's nothing like the thrill of victory. Just ask the winners of the second annual GrassRoots Communities@ca national competition. Given the task of creating websites to showcase the places they live, winning schools reached higher and farther than ever before.

Part of Canada's SchoolNet GrassRoots Program, Communities@ca [www.communities.ca](http://www.communities.ca) is open to all Canadian K-12 schools with the drive and ambition to educate the world about the uniqueness and splendour of their community.

The top five winners for 1999–2000, covering an area from Manitoba to Newfoundland, produced exceptional sites that are as diverse as the places they describe. These sites represent students' visions of themselves and their communities, as well as their hopes for the future.

Placing first, and winning the top prize of \$3,000, was St. Elizabeth Catholic School from Ottawa. A group of 30 Grade 6 students in the Program for Gifted Learning developed *The Rideau Canal: Ottawa's Community Waterway* [www.occds.on.ca/~sel/rideau/index.html](http://www.occds.on.ca/~sel/rideau/index.html). These bright 10- and 11-year-olds put together a fun and user-friendly guide to Ottawa's world famous Rideau Canal. Website mascot Gatino accompanies visitors through a journey in time that recounts the canal's rich history, as well as its bustling present.

"The project was an excellent way to enhance our study of communities, geography and history," the students say. "We had an opportunity to use the Internet to find relevant and up-to-date information on the Rideau Canal and learn new things about this local attraction that we sometimes take for granted."

What makes this website stand out is the sheer amount of engaging information, all presented in a professional, yet easy-to-read man-

ner. As well as plenty of fun facts, the site includes numerous online quizzes and games so visitors can test their knowledge of the Rideau Canal. Hands-on learning is what this site and the Communities@ca competition is all about.

"Our first place win still has us flying high," adds Dalia Naujokaitis, Special Assignment Teacher.

Coming in second, and earning a \$2,500 prize, was Salisbury Morse Place School from Winnipeg. This school's site, *Winnipeg: A View from the East* [www.smp.resd.mb.ca/comm.ca/frame.html](http://www.smp.resd.mb.ca/comm.ca/frame.html), is a colourful, in-depth look at the city and its many attributes. A total of 270 junior high students collaborated on this interactive site.

"Participating in the Communities@ca competition was both educational and fun," says language arts teacher Janet Dent. "We worked on gathering information for our site and proofreading or updating the site during regular classes."

Despite the obstacle of working with students from 11 classes and needing to keep the project flowing smoothly, as if a smaller group had put it together, the final outcome is spectacular. Tour guide Todd steers visitors through information about Winnipeg in the form of facts, viewpoints, quizzes, artists' renditions of city life, essays, messages and reflections about the community written by the junior high students themselves.

"Many thanks to Communities@ca for organizing such an encompassing competition and helping us learn more about our city," adds Dent.

Third place, and \$2,000, went to Laval High School in Placentia, Newfoundland, for its *Communities of the Placentia Area* site [www.k12.nf.ca/laval/lavalhr.html](http://www.k12.nf.ca/laval/lavalhr.html). Students at Laval have been working for years to perfect the site, with new students taking over the reins as others move on. The site presents a myriad of information on the 12 communities surrounding the town of Placentia, from employment and lifestyles to interesting birth customs and games. The site is a great resource for anyone pursuing serious research on the region, as well as those just curious about a unique corner of Canada.

"I think students have benefited greatly by working on the communities site," affirms teacher Mary Moore. "Many, many pieces of incidental information were picked up by them that they were unaware of. As well, the evaluation of other communities [student groups helped choose the winning sites] gave them a Canadian learning experience."

Coming in fourth place, with a \$1,000 prize, was Lower Coverdale Elementary School from Lower Coverdale, New Brunswick. The school's *Lower Coverdale Community Web Site* <http://cap.unb.ca/nb/lowercoverdale> was a truly collaborative effort involving the entire community.

"Lower Coverdale is a small, rural school—K-5 with 80 children—and so to take part in such a national contest meant that we had to have commitments from everyone," explains teacher Sandra Perkison. "Children, parents, grandparents and teachers, among others, all played an important role in gathering and organizing the information that we've included on our site."



This community site is a shining example of what can be achieved when different generations work together. Much of the information was acquired through phone interviews with seniors, conducted by Grade 4 and 5 students. Students from other grades contributed pictures and reflective essays and researched the best games and puzzles on the Internet for the "10 Coolest Canadian Kids' Sites" section.

"It was our absolute pleasure to have been part of this contest," Ms. Perkison adds.

Rounding out the top finishers, with a \$600 prize, was Brookside Secondary School from Cobourg, Ontario. The Brookside site, *Reaching In/Reaching Out* <http://ncboard.ncboard.edu.on.ca/brook/riro/index.htm>, is a collection of experiences from inside the Brookside Youth Centre for young offenders, of which the school is a part.

Members of the geography, English and communications classes at Brookside combined resources to show that Brookside is its own little community. By comparing the communities outside and inside the fence, and discovering positives and negatives along the way, the students demonstrate that, while Brookside is not a place anyone would, or should, want to be, it does provide many opportunities for young people to get their lives back on track.

The site includes a powerful and revealing collection of poetry and prose, much of which expresses members' hopes for the future.

Along with the top five finishers, Communities@ca awarded \$300 honourable mention prizes to each of the following 10 schools:

- Fatima Academy, St. Bride's, Newfoundland: *A Virtual Tour of the Cape Shore II* [www.k12.nf.ca/fatima/vtour.htm](http://www.k12.nf.ca/fatima/vtour.htm)
- Grand Tracadie Elementary School, Grand Tracadie, Prince Edward Island: *Harbours and Havens* [www.edu.pe.ca/grandtracadie/community/](http://www.edu.pe.ca/grandtracadie/community/)
- Jack Hulland Elementary School, Whitehorse, Yukon: *Our School and Community* [www.yesnet.yk.ca/schools/jackhulland](http://www.yesnet.yk.ca/schools/jackhulland)
- J.E. Lapointe School, Beaumont, Alberta: *The Town on Top of the Hill* [www.blackgold.ca/schools/lapointe/beau2000/2000/beaumont.htm](http://www.blackgold.ca/schools/lapointe/beau2000/2000/beaumont.htm)
- Parry Sound High School, Parry Sound, Ontario: *Parry Sound—Our Community* [www.pshs.org/aboutus/community](http://www.pshs.org/aboutus/community)
- Prince of Wales Collegiate, St. John's, Newfoundland: *St. John's: North America's Oldest City* [www.pwc.k12.nf.ca/~stjohns/](http://www.pwc.k12.nf.ca/~stjohns/)
- Sacred Heart All Grade, Conche, Newfoundland: *A Visit to Conche* [www.k12.nf.ca/shag/welcome.htm](http://www.k12.nf.ca/shag/welcome.htm)
- Selkirk Elementary School, Whitehorse, Yukon: *Our School and Community* [www.yesnet.yk.ca/schools/selkirk/](http://www.yesnet.yk.ca/schools/selkirk/)
- Vedder Middle School, Chilliwack, British Columbia: *The Stó:lō Nation* <http://vms.sd33.bc.ca/stolo/index.htm>
- Wyevale Central Elementary School, Wyevale, Ontario: *Wyevale School Community* <http://wye.scdsb.on.ca>

Grand Tracadie Elementary School also won the \$300 Distinguished New Site Award for first-time participants.

Congratulations to all the GrassRoots Communities@ca participants and winners for their dedication and hard work in building these interesting and informative websites, working with each other and their communities, and showing the world both the beauty and uniqueness of Canada and what Canadian youth are capable of achieving. Rest assured, Canada—our future is in good hands.

*Jitka Licenik studies communications at Simon Fraser University in Burnaby, B.C., and is on special assignment with Canada's SchoolNet.*

**GrassRoots Communities @ca**

## St. Roch II: Recreation of the Original Voyage

On July 1, 2000, 60 years after the St. Roch sailed into maritime history as the first vessel to successfully navigate the Northwest Passage from west to east, the Vancouver Maritime Museum and the RCMP launched the St. Roch II.

During the six-month journey to recreate the original voyage, encourage your students to explore Canada, its culture and marine heritage. Try out some of the online teaching tools, as well as the exciting projects.

For more information, visit [www.stroch.org](http://www.stroch.org)



*The St. Roch II is journeying through the Northwest Passage this fall.*



I peered into the BAD-LAB. At first glance, the room looked like any other computer lab. On closer inspection, I noticed cameras and microphones placed around the room. As well, there was a large projection screen on the far wall and a projector mounted on the ceiling.

The Broadband Applications and Demonstration Laboratory, more commonly known as the BADLAB, is a state-of-the-art facility at the Communications Research Centre (CRC) in Ottawa. Employees at the federal government facility develop fibre-optic communications systems, and demonstrate and test broadband applications and services through various Canadian and international networks.

The BADLAB is mission control for VirtualClassroom, a CRC program that uses broadband technologies (which can handle a lot of data) as an educational tool. VirtualClassroom allows students to interact with each other via videoconference from multiple remote locations through advanced networks, such as CANARIE's CA\*net 3 (run by a group of private sector companies and the federal government) and satellite and wireless links.

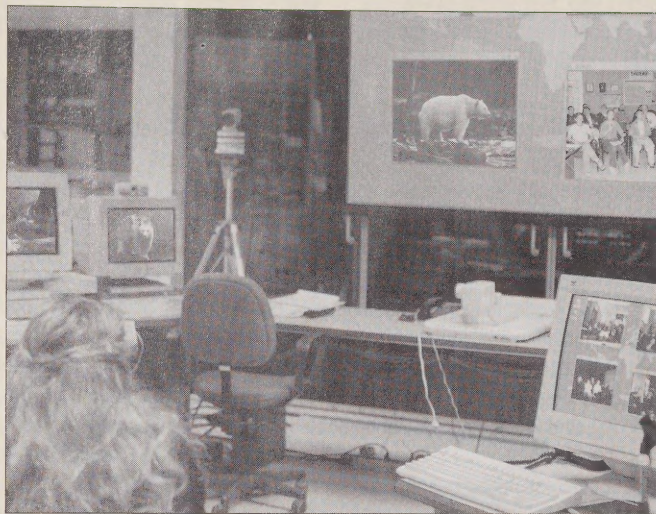
What this means is that schools from several cities across Canada can come together to form a virtual classroom. Students see all their fellow participants at all times in a split-screen projection and engage in a real-time conversation.

I visited BADLAB recently to interview students from five schools in four locations across Canada. The students taking part were from J. Percy Page Composite High School in Edmonton, Curtis Secondary and Westview Centennial Secondary School in Toronto and Holy Heart of Mary Regional High School in St. John's, Newfoundland. Students from Buckingham High School in west Quebec sat with me in the BADLAB.

Intuitively, I knew that this session would likely be completely different from the group discussions I remembered from my high school days. In fact, I was quite curious to see how broadband videoconferencing would change how students communicate with each other and to find out whether this technology could significantly improve their learning. Also, I wondered, could VirtualClassroom

## BADLAB: Expanding the Learning Spectrum

by Tanya Sewell



Video conferencing at CRC's BADLAB.

become a realistic tool that Canadian schools could afford to use?

### Breaking Down Barriers

I started the interview by asking the students how useful they found VirtualClassroom. Nicholas from Westview answered that he'd noticed that by participating in the VirtualClassroom program, students became more observant of the world around them.

"This technology makes us more aware of different cultures that we would not normally encounter," he went on to say. "It's going to help us break out of these stereotypes and social barriers that we have."

Amey from Curtis Secondary agreed. "It makes us aware of not only the social barriers, but also economic and geographic ones," she added. "This tech-

nology makes us aware of how much we don't understand."

Building on the concept of increasing awareness, I then asked, "How would being involved with VirtualClassroom help students in a regular school setting learn better? Do you think that perhaps this technology could replace traditional classroom learning?"

The students weighed their answers carefully.

Dan from J. Percy Page pointed out that there appeared to be far fewer constraints with VirtualClassroom than with a regular class. "We can get a lot more out of it than a normal classroom setting.... We can't get rid of the classroom, but this brings something completely unique that the classroom just can't achieve."

Paul from Curtis Secondary supported Dan's observation with two illustrations showing how VirtualClassroom could be easily customized to make a unique learning experience.

Paul's first suggestion was that all the students could listen to one guest speaker. "That way we could all hear the same thoughts at the same time and... meet afterwards to discuss everyone's opinions." Paul's other idea involved forming a sort of network for schools to belong to, through which, for instance, "a group could pose a [debate] topic and other groups could log on and they could have a discussion."

It was interesting listening to these students show how flexible and personalized a learning environment a virtual classroom could



be. Not so long ago, when I was in high school, students never thought about customizing their learning environment.

To build on that idea, I next asked the students if they really thought visual interaction had to be part of communication in a virtual classroom. "So what's wrong with e-mail or telephone? Isn't the visual aspect really just an add-on?"

The students were very quick to set me straight about that notion. "You get more comfortable talking with people when you can actually see them than you can over the phone or with e-mail," Dustin from J. Percy Page at once pointed out.

Sarah from Holy Heart of Mary added, "You can learn a lot about people through their body language.... You get a lot more personality when you can see and hear. I feel very close to you," she laughed, as she spoke of her virtual classmates on the large split screen.

Dustin quickly added that communication with VirtualClassroom was much faster than with e-mail. "If I wanted to ask someone a question in Ottawa, I would have to e-mail them and wait for a response."

While the idea of technology empowering students to take charge of their own learning made more and more sense, I still couldn't quite picture, for instance, how a video debate could have as big an impact on learning as a discussion in the classroom.

Amy explained that there were, indeed, drawbacks: "[Video interaction] lacks the intimacy of a classroom when you're having a debate.... You can't get the intimacy of two people sitting beside each other."

Matt from Curtis Secondary agreed, adding, "I find it really impersonal, and it's hard to get your feelings across to other people.... I prefer one-on-one interaction."

However, Dave from Curtis Secondary explained how a virtual debate was a mind-expanding experience. "...I've been with the same people who have the same ideas year after year.... If we were able to bring [videoconferencing] into the classroom and have a class of 30 talk with another class of 30, you wouldn't have the same ideas going around in circles year after year."

One thing that surprised and intrigued me when listening to these students was that there were no teachers on screen at any of the locations. It occurred to me to ask the students, then, if split screens such as the one I was looking at would soon replace teachers in traditional classrooms.

The students replied as a group that VirtualClassroom is teacher-aided technology, rather than technology that replaces teachers. Sarah from J. Percy Page had doubts about the effectiveness of replacing teachers with video screens. "Having the teacher right there with you is a very important part of the course." The students saw the new technology as a helper, and Paul suggested that VirtualClassroom could be a useful teaching aid for a teacher. He or she could bring up graphs and video to illustrate various points during a lesson.

Some students noted that although what broadband technology can do is amazing even at its current level, it is still too slow to keep

up with the speed of on-the-spot classroom learning. Narmatha from Westview noted, "[In the classroom] we don't have to wait for technology to catch up with what we're saying.... We can use [videoconferencing] to our advantage in education, but it shouldn't replace classrooms."

As the interview ended, Dustin nicely summed up everyone's thoughts: "I don't think this technology is meant to replace the classroom," he said. "What it's doing is taking the limited spectrum we have and expanding it." I felt that these words really put the whole matter into proper perspective. Yes, the new technology is expanding our whole spectrum!

Once the interview was over, I couldn't help but think about the creative possibilities these students would have with this kind of learning experience. What a powerful tool for youth VirtualClassroom could be! How conscious the students were of their learning and of the increased edge VirtualClassroom was giving them! (Age didn't seem to make a difference, incidentally. While most of the students were in senior high school, those from Buckingham were in Grade 8.)

Certainly I could also see broadband technologies such as VirtualClassroom playing a big part in Canadian schools in the near future. What an advantage, being able to see, hear and interact with people live from around the world!

To find out more go to [www.crc.ca/index.cfm?d=research/network/system\\_apps/virtualclassroom](http://www.crc.ca/index.cfm?d=research/network/system_apps/virtualclassroom)

Tanya Sewell is a freelance journalist on special assignment with Canada's SchoolNet.

## Search On for More Innovative Schools

Twenty-four schools in the Canadian K-12 system will have the opportunity to become members of the SchoolNet Network of Innovative Schools in the upcoming school year.

Selection will be based on demonstrated leadership, commitment and success in integrating information and communication technologies in innovative ways to improve learning.

Each winning school receives \$10,000 to help them incorporate technology into daily learning. Member schools will participate in mentoring assignments, international projects and professional development workshops.

For more information on how to become a part of the SchoolNet Network of Innovative Schools, visit [www.schoolnet.ca/nis-rei](http://www.schoolnet.ca/nis-rei)





**T**he entry to the Hurley Island Project website features a map of Canada marked with 24 red stars. Each of the stars represents the location of one of 24 students, from almost every province and territory in Canada, who came together over the Internet to learn this past school year.

Hurley Island is an advanced Grade 12, two-credit Internet course about environmental sustainability and Internet technology. "It was one of the most enjoyable courses I've ever had," says Brandon Crossley, 18, from British Columbia. "It required a lot of self-discipline, but it was a welcome change to do research and find information on my own, instead of just reading about it in a textbook. I really learned a lot about environmental issues and how to create webpages using HTML."

Learning for a Sustainable Future, a Canadian non-profit organization, designed and developed the project in partnership with the Ontario Ministry of Education's Independent Learning Centre. The aim of the project is to actively engage students from across Canada so they will pose questions, investigate environmental, social and economic issues on the fictitious Hurley Island, assume responsibility for their actions, and creatively develop sustainable solutions.

It's the only course of its kind in Canada. "We don't know of any other program in Canada that allows students from different provinces to participate in a national sustainability course over the Internet," says Course Administrator Jack Nigro from the Ontario Ministry of Education. "It's a unique experience for all of the students, teachers and mentors involved."

For the students, it is a chance to learn "real-life" knowledge by having access not only to the best possible resources on the Net, but also to mentors—experts from the corporate sector, academia, government and non-government organizations. These resources offer students a realistic view of various environmental problems and answer questions in their area of expertise.

According to Dr. Diane Malley, a specialist from the federal Department of Fisheries and Oceans and one of the many mentors available online to assist students, the most significant aspect of the course was the exchange that took place among the young Canadians.

"Each student brought their individual perspective into the discussion forum," says Malley. "Students from B.C. shared their concerns about the fishing habitats of salmon with students in the eastern provinces, who were not so familiar with this issue." On the other hand, students from the Maritimes were more concerned with the seal and native fishery issues, while students from northern parts of Canada brought in issues of contamination. "That type of exchange would not have been possible without the Internet," says Malley.

In their final assignment, students got to understand further the interconnectedness of the environment, society and the economy by developing a resource management plan to maximize the economic profit of natural resources on Hurley Island without damaging the environment.

"It allows us to put everything we've learned along the year into practice," says Ontario student Chris Sheppard, 19. "I had never been much

# Hurley Island Project: the Changing Face of Education

by Isabelle Poitras

of a fan of environmental issues before, but this course has shown me that managing the environment is crucial to the well-being of our future, which makes it very interesting."

Learning for a Sustainable

Future delivered two other versions of the Hurley Island Project at the start of the school year. One version is a replica of the 1999-2000 project regrouping 24 students from across Canada, while the other gathers students from Ontario and other countries.

For now, student participation in the course is limited to a select few, but in the future LSF and its partners hope to be able to open the course to all interested students as well as produce a version in French.

"This project reflects the changing face of education," says Administrative Director Martine Brunet. "It's bringing youth together, nationally and internationally, to take action to improve the sustainability of their communities."

For more information on LSF and the Hurley Island Project, visit [www.schoolnet.ca/learning](http://www.schoolnet.ca/learning)

*Isabelle Poitras studies public relations at Mount Saint Vincent University in Halifax. She is on special assignment with Canada's SchoolNet.*

## Taking Canada to the World

Since its inception in 1991, Learning for a Sustainable Future (LSF), creator of the Hurley Island Project, has been a national and international leader in promoting knowledge, skills and values essential to a sustainable future. The group has provided training to more than 3,400 educators in workshops across the country, teaching them how to use LSF curriculum material and facilitate Internet-related activities in the classroom.

Recently, EXPO 2000 chose LSF as an international model project for sustainable development education. This has won LSF the opportunity to host an exhibit in a high-traffic area of the Canadian pavilion during the first world exposition of the 21st century, which kicked off with a bang on June 1 in Hanover, Germany.

Using water—Canada's and the world's most important sustainable resource—as its central metaphor, and featuring state-of-the-art multimedia, the Canadian pavilion gives visitors a seamlessly integrated experience illustrating how Canada offers the world a model for successfully managing relationships among humankind, nature and technology.

During EXPO 2000, LSF wants to demonstrate to the rest of the world Canadian leadership in sustainable development education and lay the foundation for its new initiative, the Global Virtual School on Sustainability Education (GVS). GVS, when fully implemented, will allow students from around the world to work together on the Internet in real time without any language barriers.



**T**hey come to us from around the world: delegations from Southeast Asia, India, South Africa and Central and South America, all intrigued by Industry Canada's Internet-based network of educational services and resources. All interested in adapting Canada's SchoolNet's unique model of learning through technology. All wanting to play a part in the vast and expanding knowledge-based economy.

Canada is considered the world leader in information and communication technologies in schools and libraries. "We haven't asked a single country to look at our program yet," observes Ethel Thayer, SchoolNet consultant and Director of International School Programs with Industry Canada's Office of International Partnerships (OIP). "International partners seek us out."

This is largely because of SchoolNet's reputation as the single best education-based Internet site on the planet. According to Thayer, SchoolNet has been swamped with inquiries almost since its inception. Its popularity has presented an opportunity to showcase our country's acumen in the areas of learning, education, resources and training worldwide.

To facilitate the process, Industry Canada created the OIP to handle specific requests for information regarding the SchoolNet model. The office acts as a reference point for foreign governments, agencies and companies wishing to develop their own electronic learning networks. OIP provides access to Canadian businesses and organizations that develop products and services related to information and communication technologies for learning and training.

Specifically, says Thayer, "our job is to demonstrate the power of Canada's SchoolNet, its programs and its tools, and to show how that model can be adapted for individual use by foreign partners."

### **What Partners Seek**

It's about more than just schooling children. Partnership efforts foster a comprehensive and sustained learning environment by focussing not just on education, but on community and workplace development as well.

# **SchoolNet Crosses the Globe**

*by Angie Rumpf*



"Part of SchoolNet's attraction internationally," Thayer explains, "is that the model itself has a worldwide focus. Anyone, anywhere, can tap into the site and find out what we're doing at home and abroad." The model provides far more than resources and services for teachers and kids. It allows for research and training, for business and economic development, for the creation of infrastructure, services and resources in the nation that uses it.

All of which is why SchoolNet has had such appeal for countries that have not established their own infrastructure or connectivity agenda. In many instances, distance education is in huge demand. OIP invites foreign partners to purchase Canadian software, learnware and curriculum models, or offers to work with partners to develop their own.

And language need not be an obstacle, adds Thayer. OIP has on more than one occasion paired Canadians with foreign business partners to localize products or to develop software in the partners' mother tongue. Thayer offers Red Escolar, Mexico as a prime example. In building their own Web-based model inspired by Canada's SchoolNet, Mexican partners opted to develop Spanish software.

SchoolNet India was developed directly from Canada's model by that country's corporate sector and is currently expanding throughout the country. Canadian and Indian companies together are developing new learnware for the Indian market.

### **The GrassRoots Model**

SchoolNet's GrassRoots Program, which awards grants to schools whose teachers and students create Internet projects, is a project-and problem-based learning model that is popular among foreign partners.

One of the earliest international connections along these lines linked a school in Ghana with the University of Toronto Schools (UTS) in partnership with the World Bank. In Ghana, a class researched Canadian culture and education through the Internet and communication with UTS in Toronto. A group of girls at UTS then created a website full of their research on Ghana with pages trimmed in Ghanaian cloth, photographs, Quick Time video reels and text information, which they presented to the World Bank president during a videoconference.



Since then, international school alliances have taken off. All over the world, schools are pairing up to work on similar projects via the Web. Kelvin High School in Winnipeg and Sedaya College of Malaysia collaborated on a website project, which Foreign Affairs Minister Lloyd Axworthy and Malaysia's Minister of Education launched. Westmount Secondary School in Hamilton recently finished an extensive project with a school in Singapore. The Hebrew Foundation School in Quebec paired students with peers from an Israeli school to learn about their respective cultures.

A videoconference undertaken by Joamie School in Iqaluit and a partner school in Ushuaia, Argentina, part of a project in geography and social studies, has led to plans for future projects. (This spring, Joamie School received a \$10,000 grant from SchoolNet Network of Innovative Schools. Teacher Elizabeth Tumblin received a Prime Minister's Award for Teaching Excellence in 1997.)

In a similar endeavour, Our Lady Peace School in Laval, Quebec, is helping St. Flanan's College in Ennis, Ireland, build a website. The Quebec school is also part of the SchoolNet Network of Innovative Schools.

Thayer believes that the true spirit of partnership has been instrumental in the success of SchoolNet's international partnerships to date. "We never walk into a situation and insist on our model, leaving our partners to sort out what it means to them. It is part of our mandate to demonstrate and assist." In fact, SchoolNet and the OIP work with partners to determine what's best for their education goals, their culture and their population. Links are established and agreements made with both the private and public sectors to help maintain what has been started. In many ways, SchoolNet helps its partners avoid making the mistakes it may have made in past.

Delegations to Canada are often taken to see schools in action. "It's interesting and worthwhile," says Thayer. "International visitors always compliment us on our connectivity and implementation of information and communications technologies in the classroom. When and if they decide to adopt our model, we share it with them, inform them, and help them to build something that meets the specific needs of their educational system, their culture and their economy."

## Benefits to All

Whether it's through developing software and learning tools, funding research or training employees, foreign partners are often pleasantly surprised by the marketing opportunities they

suddenly find available to them as a result of their association with Canada's SchoolNet. Trinidad and Tobago's Royal Bank, for instance, has forged an alliance with the country's government to help fund education development, thus creating opportunities and jobs, both within the company and elsewhere.

Canadian companies benefit from international alliances, too.

Not only do they profit from the purchase of Canadian-made software and other education products, but international purchases also help investment in Canada and create jobs for young Canadians both at home and abroad.

For example, Northwestel recently agreed to provide a satellite link to facilitate a videoconference between students in Argentina and those at Joamie School in Iqaluit. Volunteering to provide the technology to link students at the top and bottom of the world is a generous contribution from the communications company.

What corporate partners at home and abroad understand are the benefits of education in the burgeoning knowledge-based economy. A more educated and better trained population is a valuable one, one from which a new generation of entrepreneurs and businesspeople will emerge to compete in the world market. Access to better training for today's adults can mean a rise in productivity. Education, training and retraining in the private sector, all of it may lead to an improved standard of living for the communities in question.

In the end, says Thayer, the SchoolNet model is about bringing equity to education via access. No matter how remote, learners of all ages must have access to the same quality and types of information. Through the efforts and guidance of SchoolNet and OIP, international partners can conserve their culture, preserve their history, educate and train their people and boost their economy. It's working in 15 countries and regions so far. May the next decade see it at work in countless more.

For more info on the office of International Partnerships, visit [www.schoolnet.ca/oip-bpi](http://www.schoolnet.ca/oip-bpi)

*Angie Rumpf is a freelance journalist on special assignment with Canada's SchoolNet.*

## All Around the World

Canada has agreements or Memoranda of Understanding with these countries and regions to assist with information and communication technologies development:

Argentina  
Brazil  
Chile  
China  
Colombia  
Hong Kong  
India  
Italy  
Kuwait  
Mexico  
Singapore  
South Africa  
Southeast Asia  
Trinidad and Tobago  
United Kingdom





Having graduated with a Bachelor of Literature degree from Mount Allison University in 1997, Jennifer Johnston was looking for a new and challenging experience. While surfing the Web for jobs, Jennifer stumbled across NetCorps Canada International, a Youth Employment Strategy program that offers information and communication technologies (ICT) internships in Third World countries.

NetCorps, which responds to young Canadians' needs for career development, brings the benefits of the wired world to developing countries. The program is a partnership between Industry Canada and a coalition of some of Canada's largest international development agencies, such as Canada World Youth, Alternatives, Canadian Crossroads International, the Canadian Society for International Health, Canadian University Service Overseas (CUSO), Human Rights Internet, Oxfam-Québec, Voluntary Service Overseas (VSO) Canada and the World University Services of Canada. By March 31, 2001, the program will have filled more than 500 positions in Asia, Central and Eastern Europe, Latin America and Africa.

# Young Canadians Bring Wired World to Developing Countries

by Isabelle Poitras



"This was totally my thing," remembers Johnston. "Since high school, I had always been interested in ICT, but did not really have that much knowledge about it. I thought NetCorps would be a wonderful opportunity for me to learn more about ICT, but most of all, I would also get to travel abroad, improve my Spanish and acquaint myself with a whole new culture."

Johnston decided to follow her dream and took computer classes at Concordia University to acquire the computer skills she needed to join NetCorps. Two years later, she was on her way to Costa Rica.

"The program is making a huge difference," says Johnston. "There is a strong need for people with ICT knowledge in developing countries. It's not necessarily that they don't have the same technology

as we do. In fact, I was amazed to see the level of technology they possessed. The problem is that they were not exploiting their systems at full capacity and that's where we step in."

In Costa Rica, program volunteers helped set up networks, built a payroll database for a factory, facilitated group seminars, and trained all of the employees to use the software on their computers. "We show them what they can do with their system," says Johnston, "and

## SEE CANADA'S HISTORY AS IT DEVELOPED.



CN is proud to donate its historical collection of photographs to the Canada Science and Technology Museum Corporation in Ottawa. Designated as having "outstanding significance and national importance" by the Canadian Cultural Property Export Review Board, this collection will be preserved by the museum and made easily accessible online. Now, and for many years to come, Canadians of all ages and backgrounds can enjoy this national treasure chronicling the development of our country over the last 150 years. See it all at [www.science-tech.nmstc.ca](http://www.science-tech.nmstc.ca) or [www.cn.ca](http://www.cn.ca)



at the same time, we get to build our own skills and gain experience that will benefit us in the future."

In South Africa, NetCorps volunteers are setting up a South African version of Canada's SchoolNet. Seven schools have been given computer labs and funding for Internet access. In January 1999, SchoolNet SA recorded only 47 members, but that number rocketed to 213 in just six months. These members have access to training, technical assistance and boundless resources on the Internet.

"They are so keen to learn," says British Columbia NetCorps volunteer Chris Dorazio, 19. "It's uplifting the community. Schools and members of the community can acquire computer skills, which will later help them find employment."

Most volunteers agree that volunteering with NetCorps is a once-in-a-lifetime opportunity. "You learn so much so fast," says Johnston. "You have no choice. You're on the spot; you're their only resource person." For many participants, NetCorps is also a stepping stone to a future career in ICT. Johnston has been working, since her return from Costa Rica, as a junior project officer for NetCorps Canada International in Ottawa and plans a future career in the information technology field.

For more information, visit the NetCorps Canada International website [www.netcorpscyberjeunes.org](http://www.netcorpscyberjeunes.org)

*Isabelle Poitras studies public relations at Mount Saint Vincent University in Halifax. She is on special assignment with Canada's SchoolNet.*



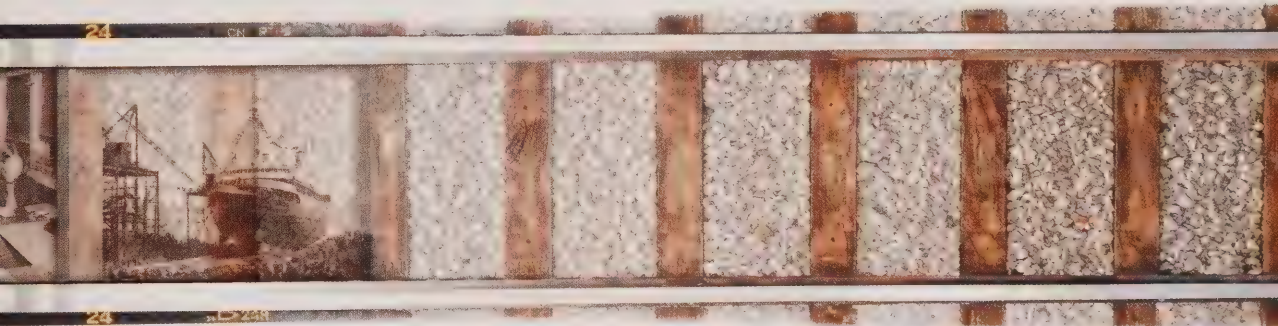
## Explore Canada's First Nations

Tap into a comprehensive source of information about Canada's First Nations that you can use in your classroom.

Visit First Nations SchoolNet and discuss teaching resources or Traditional Native American stories, myths, animal legends and more.

First Nations SchoolNet also gives First Nations communities the opportunity to use exciting new technologies and provides the schools in these communities with affordable high-speed connection to the Internet via DirecPC satellite terminals.

Make sure to visit [www.schoolnet.ca/aboriginal](http://www.schoolnet.ca/aboriginal) next time you teach your class about Canada's First Nations.



CN Images of Canada





# Students Embrace Space with SchoolNet

by Jason Gadoury

**O**n International Embrace Space Day 2000, May 11, Canada's SchoolNet partnered with the Canadian Space Agency (CSA) to create an exciting learning opportunity for Canadian kids.

Launched in 1998, Embrace Space is an annual international celebration of achievements in space designed to captivate youth interest, understanding and participation in space science, technology and mathematics. To mark the culmination of this year's campaign, NASA astronaut and Embrace Space official spokesperson John Glenn and CSA astronaut Dave Williams hosted an hour-long discussion forum for youth.

Glenn and Williams shared their personal experiences and discussed the importance of space medicine research and its impact on our quality of life on Earth. Kids from across Canada participated in the event on site at CSA headquarters near Montréal, through teleconference from local science centres and museums, and through the Internet via a SchoolNet webboard and live webcast.

Kids were invited to submit questions on behalf of their class through the SchoolNet Embrace Space website prior to the event. Student and teacher interest was obviously high, since SchoolNet received nearly 100 questions in less than a week. Five classes were selected and got to pose their question to the astronauts.

The astronauts remarked on the quality of the questions, such as one from a Grade 5 class in Alberta asking, "What would happen if you got a toothache or infection in space?" Glenn said that, although astronauts must be healthy before going on a mission, doctors join them to take care of aches and infections in space. They can even do tooth fillings on the shuttle!

A Grade 9 class in Manitoba asked, "Does your digestive system work differently in space?" Students discovered that people do not need gravity to digest, but that digestion takes a bit longer in space.

The live video webcast captured all the events in the CSA auditorium and broadcast them live over the Internet. Participating schools and anyone else visiting the event website could follow the text-based discussion and also watch the video in real time. This combination of reading information and watching video created a dynamic and entertaining tool to engage kids in a virtual lesson on space medicine.



**John Glenn and Dave Williams in front of the SchoolNet webboard answering students' questions.**

Embrace Space 2000 was made possible through the cooperation of SchoolNet, the CSA, CBC Newsworld, science centres, museums, private industry and not-for-profit supporters of the Embrace Space program, and teachers and students from across the country.

To view the archived webboard, go to [www.schoolnet.ca/embracespace](http://www.schoolnet.ca/embracespace)

*Jason Gadoury is a Communications Officer with Canada SchoolNet.*

## I Have a Dream

Young people need to dream, wonder and not be afraid to take risks. To motivate them, **Kidlink**, a 10-year-old virtual organization of volunteer educators worldwide, has designed an information and communications technologies-based learning program called **I Have a Dream**.

In six modules, students explore their personal dreams for their future and a better world and develop online projects to try to make them come true.

Canada's SchoolNet is proud to be a member of **Kidlink** and to sponsor one unit of **I Have a Dream**, called The Dream Project Starts, in which work on the dream projects actually gets under way.

For more information, visit [www.kidlink.org](http://www.kidlink.org)



# A Year of GrassRoots

by Isabelle Poitras

**T**hroughout the 1999–2000 school year, Microsoft Canada and the SchoolNet GrassRoots Program joined together to recognize teachers and students for their achievements creating innovative and interactive online learning projects.

Every week, beginning in November 1999, a GrassRoots project has been chosen as project of the week. From these, a project of the month was selected. Weekly winners received Microsoft's Encarta Reference Suite 99 at a value of \$149, while monthly winners received Microsoft's FrontPage 2000, valued at \$239.

Visit these wonderful projects in the Microsoft/GrassRoots commitment to Learning Hall of Fame [www.schoolnet.ca/grassroots](http://www.schoolnet.ca/grassroots)

## Projects of the Month for 1999–2000

**Musikajour: les grandes chansons de la petite école**

[www.cssh.qc.ca/ecoles/st-damase](http://www.cssh.qc.ca/ecoles/st-damase)

École Saint-Damase, Saint-Damase, Quebec

Students created a compact disc containing more than 16 original songs. The songs and lyrics are featured on the website along with mascots, created by the students, that explain the meaning behind the music.

## Cold War Flashpoints—Personal Perspectives

[www.pwc.k12.nf.ca/coldwar](http://www.pwc.k12.nf.ca/coldwar)

Prince of Wales Collegiate, St. John's, Newfoundland

In this project, students highlight important conflicts that took place during the Cold War.

## La boîte à jeux

<http://esjn.csriverraine.qc.ca/site/Boite/default.htm>

École secondaire Jean-Nicolet, Nicolet, Quebec

Students created a magnificent collection of educational games for children.

## ESD Student Publishing Centre

<http://sesd.sk.ca/publish/Default.htm>

South Corman Park School, Saskatoon, Saskatchewan

Students created the Student Publishing Centre for anyone interested in publishing their artwork, stories, poetry, webpages, book reports or class projects.

## J. Kicks Butts

[www.ij.s.k12.nf.ca/commsolutions.htm](http://www.ij.s.k12.nf.ca/commsolutions.htm)

J. Samson Junior High School, St. John's, Newfoundland

Grade 7 students had "fun with a serious purpose" creating a website that will help increase the awareness of issues related to smoking. From your body, to your budget or friends, the students total up the costs of this bad habit and urge you to "Kick Butts!"

## Bishops College Intertidal Zone Field Trip

<http://redbaron.bishops.ntc.nf.ca/wells/fieldtrp/field.htm>

Bishops College, St. John's, Newfoundland

If you've ever wandered along the ocean shore, Bishops College's students can show you things you may have missed! Their virtual field trip along the Newfoundland shoreline reveals the life forms and ecology of the intertidal zone.

## About Fort Nelson

<http://rla.sd81.bc.ca/%7Eftnelson/ftnelson.html>

R.L. Angus Elementary School, Fort Nelson, British Columbia

Students researched and interviewed their way across Fort Nelson—from finding out about the funniest thing that happened to the school principal to learning about Buffalo farming—to produce this virtual tour of the community.

## Waycobah

<http://kinu.ns.ca/%7Ewaycobah/waycobah.html>

Waycobah First Nation Secondary School, Cape Breton, Nova Scotia  
Students created this website to inform people about their Mi'kmaq community of Waycobah in Cape Breton. The site offers wonderful information on the reserve's elders, geography, history and events.

*Isabelle Poitras studies public relations at Mount Saint Vincent University in Halifax. She is on special assignment with Canada's SchoolNet.*



**Eyes-on, Minds-on, Hands-on!**

The National Gallery of Canada and the Canadian Museum of Contemporary Photography introduce their new Student and Teacher Programs 2000–2001

A complement to visual arts curriculum. Inspiring student and teacher workshops, programs and resources.

Discover our Guided Visits, Studio Activities, Teen Docent Program, One Day School Program, Special Exhibitions, Looking at Pictures, Teacher Workshops, Educator Evenings, Videos, Slide Kits, CyberMUSE ([cybermuse.gallery.ca](http://cybermuse.gallery.ca)), the Gallery's on-line educational tool) and much more...

To access extended information on any of the new School Programs, visit the Gallery's Website [national.gallery.ca](http://national.gallery.ca)

Call the Group Reservations Office at (613) 990-4888 for a complimentary brochure.



National Gallery of Canada / Musée des beaux-arts du Canada

380 Sussex Drive, Ottawa, Ontario 1-800-319-ARTS [national.gallery.ca](http://national.gallery.ca)

**Canada**



# Spotlight on GrassRoots: New Investor, New Projects

by Jean Tessier

**O**n May 12, 2000, teachers and students at two Ottawa-area high schools had the chance to showcase their latest GrassRoots online projects to the media and industry and government executives.

The occasion was a press conference at Rideau High School in Ottawa to announce a \$200,000 investment by Cisco Systems Canada in Canada's SchoolNet GrassRoots Program. On hand to celebrate the announcement were Cisco's Canadian General Manager, Pierre-Paul Allard, and Industry Minister John Manley.

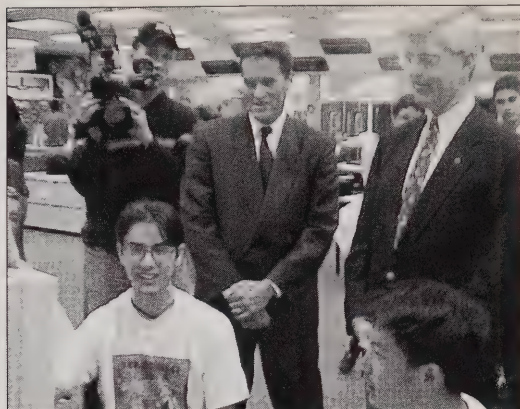
GrassRoots projects are Internet-based projects that combine the study of traditional curriculum subjects with opportunities for students to develop employment-related information and communication technologies skills. Federal and provincial governments fund the program in partnership with the private sector. Cisco's investment will help the program reach its goal of supporting the creation of 20,000 online projects by March 31, 2001, and providing opportunities for up to five million Canadian students to develop information and communication technologies skills.

During the event, Rideau students demonstrated their *Rideau Craftsman* website, which profiles products the students build and sell to raise money for school activities. Customers can view merchandise online before placing an order electronically. Plans for the future include an e-commerce platform to allow credit card transactions over the Web.

Students from Earl of March Secondary School in Kanata demonstrated a project they are developing in partnership with the Vimy House Branch of the Canadian War Museum. Using primary sources and direct access to wartime artifacts, teams of students have been producing interactive exhibits describing the World War II experience from a number of perspectives, including those of soldiers and nurses. By researching content and creating these exhibits, students are exploring history while developing their language arts and writing skills. Eventually, students even plan to produce 3-D computer animation detailing the inside of a tank.

In the hours leading up to the event, Rideau High was a hive of activity, as staff and students raced to get everything ready for their guests. The school's Cisco Networking Academy students helped by networking the computers that would support the project demonstrations.

"My students love working with technology," explains Lorin MacKay, a Rideau High School teacher and Cisco Academy Coordinator. "They love the hands-on work, and the responsibility of being treated like an adult in the real world."



Cisco's Canadian General Manager, Pierre-Paul Allard (centre), and Industry Minister John Manley with students at Ottawa's Rideau High School who are showcasing their latest GrassRoots online projects at the May 12 press conference.

Through the Cisco Networking Academy program, students develop a solid grasp of information network infrastructure and prepare for Cisco Networking Certification.

"We're very pleased to be able to offer our students these opportunities," says Principal Patricia Irving. "As an inner-city school, we're aware of the issues facing schools in low-income areas. It's key that students have the chance to develop technology skills that will prepare them for the future. SchoolNet GrassRoots helps with that."

To view the *Rideau Craftsman* site, visit [www.ocdsb.edu.on.ca/RIDEweb](http://www.ocdsb.edu.on.ca/RIDEweb)

To view Earl of March Secondary School's project with the Canadian War Museum, visit [www.eomss.net/eweb/museum/index.html](http://www.eomss.net/eweb/museum/index.html)

Jean Tessier is a Communications Officer with Canada's SchoolNet.

## ADVERTISERS' INDEX

If you want more information about the organizations

listed below, please fax, mail, call or e-mail us:

Quadrant Educational Media Services Inc., 258 Wallace Ave., Ste. 206, Toronto, ON

Tel.: (416) 537-2103, Fax: (416) 537-3491

e-mail: [teachmag@istar.ca](mailto:teachmag@istar.ca)

<input type="checkbox"/> CN .....	12
<input type="checkbox"/> Environment and Plastics Industry Council .....	21
<input type="checkbox"/> National Gallery of Canada .....	15
<input type="checkbox"/> Statistics Canada .....	18, 19
<input type="checkbox"/> Toronto Dominion Bank and Canada Trust .....	24
<input type="checkbox"/> Visa Canada .....	23



## Fireworks Safety Explodes onto SchoolNet

**F**ederal government programs offer a wide variety of education material. Natural Resources Canada, for example, recently launched the Family Fireworks Safety Lesson Plan, yet another example of the great teaching tools available to educators through SchoolNet.

The program is a cross-curriculum lesson plan that pulls elements of history, mathematics and chemistry together to unlock the mysteries of the art of fireworks. Each year in Canada, many children are injured from the improper use of fireworks in consumer or family fireworks displays. The Canadian Hospitals Injury Reporting and Prevention Program database suggests that many of these injuries are preventable with proper education and supervision.

The lesson plan helps educators create a program that raises awareness among children in grades 4 through 7, parents and teachers of the safety issues surrounding consumer fireworks, and the importance of adult supervision and having respect for such potentially dangerous items. The site also strives to counteract the plethora of information on the Web that promotes illegal and unsafe activities such as bomb making.

Co-created by Natural Resources Canada, Health Canada and educators in Nova Scotia and British Columbia, the lesson plan was introduced as a pilot project in three Canadian classrooms in two communities over the 1998 Halloween season. More than 60 children participated.

The teachers and students were very enthusiastic about the program. "I had to hold my class back," says Grade 5 teacher Gordon Power of South Bar Elementary School in Nova Scotia. "My students loved working with this site. They were enthralled with the organization, the graphics and the challenges presented in the questionnaires and tests. Furthermore, they were enticed to actively participate in their home family fireworks celebrations during Halloween. A number of parents phoned complimenting our work and the site."

"It was a really big deal to the kids," says John Perpich, Principal of Seymour Admiral Elementary School in Vancouver. "They were excited that the results were being sent to Ottawa. It had an impact that kids remember. There were less hassles with fireworks this year."

"The kids loved it. It focussed awareness on the safety issues. The disbursement of knowledge was great. "The initiative was excellent, very creative, a good way to go!" say Robin Leclair and Lyndy McMruchy, Grade 6 and 7 teachers at Seymour Admiral Elementary School in Vancouver.



Gordon Power, Grade 5 teacher, and Gary Corbett of Natural Resources Canada with Grade 5 students at Jamieson Elementary School running the Explonet pilot.

The successful delivery of the pilot program resulted in positive changes in attitude about safety—attitudes that the young students will carry into their teen years when the potential for injury increases.

The lesson plan site includes a built-in feedback mechanism, which has proven to be a sound way to collect data and knowledge directly from the participants. This feedback will help program organizers adjust the site and content.

For more information, contact Gary Corbett of Natural Resources Canada at (613) 947-8389, or visit <http://mmsd1.mms.nrcan.gc.ca/explonet/>

### Canada's SchoolNet's School Site Builders

#### Best on the Net

This fall, SchoolNet will announce the winners of the 1999-2000 SchoolNet Site Builders Competition. Two winning schools, one French and one English, will receive a Dell Power Server, with an estimated value of \$7,500 each. Selection is based on criteria such as usefulness, functionality and originality.

To learn about this year's winning schools and find out how to participate in the 2000-2001 competition, check out [www.schoolnet.ca/builders](http://www.schoolnet.ca/builders)



**T**eachers across Canada are finding out how valuable it is to incorporate Canadian statistics into their classrooms using Statistics Canada's education resources ([www.statcan.ca](http://www.statcan.ca)). On the site, they are uncovering dozens of ideas on how to involve their students in the issues and concerns facing their country.

### Easy and free access

Among their many challenges, teachers are faced with time and budget constraints. The education resources have been developed with this in mind, offering fast, straightforward and free access for teachers and students. The site is easy to navigate and search by theme. Lesson plans provide numerous classroom activities that demonstrate how to use data found on the site. Several teachers' kits give the full range of tools to get the most out of the various Statistics Canada products that complement primary and secondary school learning. For example, the Census Teacher's Kit supplies various activities to be used in conjunction with census data, plus classroom handouts and discussion questions. Look for the new Census 2001 Kit, which will be available later this fall.

### Coming soon to a workstation near you

$\Sigma$ -STAT, Statistics Canada's education database of census and socio-economic information, is an Internet-based product that educational institutions can now access for free.  $\Sigma$ -STAT contains a warehouse of current and historical information about many aspects of life in Canada. Teachers can access information by theme and then extract, manipulate and save the colourful maps and graphs to fit their needs. And, teachers have access to  $\Sigma$ -STAT from home, with a userid and password.

$\Sigma$ -STAT comes complete with a host of activities developed by professional educators, each with a certain grade level in mind. Teachers will also find links to short articles that expand on different topics of the day.

### A valuable tool for students

Students have their own entry point into the education resources. They are researching projects, uncovering facts, supporting their theories and learning more about Canada. For example,

*The Statistical Profile of Canadian Communities* is an excellent module for teaching children about other parts of their country. The link to *Canadian Statistics* provides them with access to a large range of relevant national data that are updated as soon as the information is released by Statistics Canada.

Students can apply Canadian statistics to any discipline; from geography to home economics. They gain a better understanding of the practical applications of that subject, learn to analyze and predict trends and generate new ideas about problem solving strategies for the future.

The secondary and equally important gain for students is the refining of their Internet skills. Learning to navigate, gather and share information on the Internet have become necessary basic skills needed to compete in today's job market. "Every moment spent at the keyboard is a stroke towards (a student's) proficiency in a marketable skill.... Using the Statistics Canada website will raise their comfort level as it improves their search skills. By unveiling their own information, your students will retain the experience and the

data more so than if the facts and figures were delivered as part of a lecture," notes Patricia Osmond, a home economics teacher in Manitoba.

### Preparing for the year ahead!

Teachers are logging on and discovering the many tools and techniques that are found at [www.statcan.ca](http://www.statcan.ca) to add the flavour of Canadian statistics to their classroom. The site offers an ongoing dependable source of accurate data and online support. But more importantly, it offers a bank of resources that teachers can draw on to assist in their challenge of educating our youth.

*Kathryn James is a Marketing Officer with Statistics Canada.*



**Bringing  
Canadian Statistics  
to Life**

One Classroom at a Time  
by Kathryn James  
Editorial Sponsorship

Statistics Canada is supporting teachers and helping kids get the most out of [www.statcan.ca](http://www.statcan.ca). Education Outreach team member Suzie Carpentier shares her expertise with a western Quebec student.

LEARNING WITH  
Canadian Information



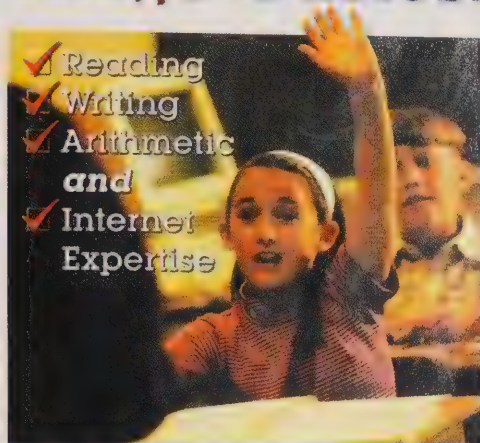
Statistics  
Canada

Statistique  
Canada

Canada




## The *new* Basics:



Visit our Education Resources  
for dozens of curriculum ideas.

**www.statcan.ca**

Innovative tools to educate the Internet Generation.

 Statistics  
Canada Statistique  
Canada

Canada

## Coin Recognizes Canada's Cultural Diversity

Members of Canada's high school class of 2000 received more than just their diploma to mark their graduation.

These students also received the new Harmony 25-cent coin. Distributed in a special Extreme Attitudes "quarter card," the coin was to be used on graduation night as a symbolic reminder never to drink and drive.

The coin is one of 12 the Royal Canadian Mint is issuing this year, one each month, to mark the new millennium. Designed by individuals from all walks of life, the coins celebrate a future full of promise and can be obtained at any Canadian post office.

Harmony, the June coin, portrays Canada as a tapestry of cultures and beliefs joined together to carry the nation forward.

For more information,  
visit the Royal Canadian  
Mint website:

**www.rcmint.ca.**

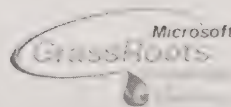


## Microsoft® Supports GrassRoots Winners

As part of its commitment to encourage teachers and students to develop information and communication technologies skills through SchoolNet's GrassRoots Program, Microsoft Canada is giving away free software for GrassRoots projects selected as Project of the Week and Project of the Month. Every week, all ongoing GrassRoots projects with a web-site are eligible for the Project of the Week award: Microsoft's Encarta Reference Suite 99. And each month, one of the Project of the Week winners will be selected for the Project of the Month award: Microsoft's FrontPage 2000.

For more information about the SchoolNet GrassRoots Program and this software incentive, check out the GrassRoots Program website **www.schoolnet.ca/grassroots**

To discover more ways to take advantage of technology in the classroom, explore the resources on Microsoft Canada's K-12 Education website: **www.microsoft.com/canada/education/k\_12.htm**





## Free Computers for Schools

The Computers for Schools Program collects and refurbishes surplus computer equipment from governments, organizations and individuals and then offers this equipment to Canadian schools and public libraries.

Thanks to this program, educational institutions have access to equipment adapted to their needs.

The computers are repaired and refurbished by volunteers, generally young people who are interested in computers, and by workers and retired persons in the communications field. The young people have an opportunity to rub shoulders with seasoned technicians and to acquire technical workplace experience that is highly valued by employers.

With appropriate tools, schools can create a learning environment enabling young people to prepare themselves to take their place in the knowledge economy and to master the information and communication technologies on which it is based. In addition, primary and secondary school pupils can become familiar with computing. Through this exposure to technology, young people gradually develop critical thinking skills in relation to the information to which they are exposed.

For more information on the various segments of the Computers for Schools Program (i.e. computer distribution, acquiring work experience and donating surplus equipment), visit [www.school.ca/cfs-ope](http://www.school.ca/cfs-ope) or call 1 888 636-9899.



Canada's  
**SchoolNet**  
Rescol  
canadien

## [www.schoolnet.ca](http://www.schoolnet.ca)'s New Look

Over the past several months, the SchoolNet team has been building a new website based on feedback received by our users. We have created what we feel is a more powerful, viewable and usable site. We have added some dynamic, interactive features, such as the new SchoolNet polls and the virtual tour, which offers a detailed overview of the site. By using this tour, you will learn how to navigate through the new SchoolNet website, discover all the SchoolNet services and find out how to use the different search engines effectively!

Next time you visit, make sure to view the continuously expanding SchoolNet Learning Resources. This virtual library regroups more than 5,000 resources on subjects such as art, business, mathematics, power learning tools and more! These innovative, award-winning and Internet-based educational resources and services provide teachers and learners alike with a single platform from which to access the Information Highway.

And don't forget to read *@ SchoolNet Today*, an exciting Internet news source featuring the latest online educational treasure hunts, interactive webcasts with people such as astronaut Julie Payette, petitions on banning land mines, and educational contests your students can enter. *@ SchoolNet Today* will help you and your students keep on top of learning on the Information Highway.

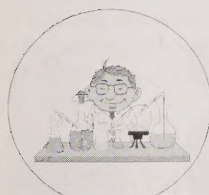
Enjoy your new site!



# [www.plastics.ca/teachers](http://www.plastics.ca/teachers)



*Click here for your  
one-stop resource of  
**FREE**  
teaching tools!*



**Plasti-Lab Tour**

*Interactive  
Science  
Lab*



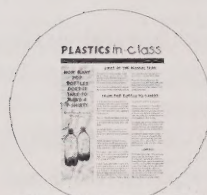
**Elephant Tour**

*In-Class  
Environmental  
Demonstration*



**Course Curricula**

*Choose  
From Five  
For K-10*



**Plastics in-class**

*Regular  
Teachers'  
Newsletter*



**Computer Game**

*On-Line  
Adventure  
Game*

**The Environment and Plastics Industry Council**  
**Tel: (905) 678-7405, ext. 241, Fax: (905) 678-0774**  
**[www.plastics.ca/epic](http://www.plastics.ca/epic)   [www.plastics.ca/peanut](http://www.plastics.ca/peanut)**  
**[www.plastics.ca/teachers](http://www.plastics.ca/teachers)**

EPIC is a council of the Canadian Plastics Industry Association



# SchoolNet's Online Educators' Forums

## An Excellent Way to Interact!

Educators: do you want to take part in a project that will change the way you think about teaching? Then join SchoolNet's Online Educators' Forums and discuss a wide variety of issues, such as classroom techniques, teachers as learners and virtual schooling, with educators from across the country any time, day or night.

What is an online forum? An online forum is a written exchange that takes place through a computer with an Internet connection. It's very similar to what might take place in a faculty lounge over coffee with a colleague or on a professional development day, except that participants do not have to be in the same place at the same time.

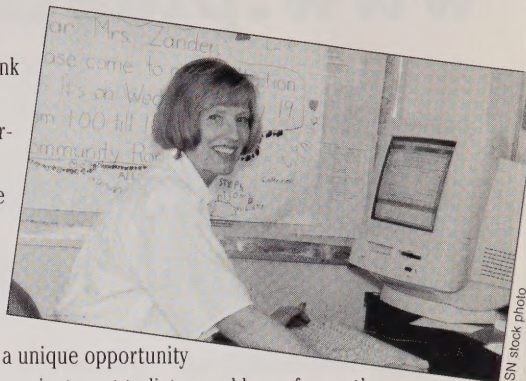
Participating with fellow Canadian educators in the SchoolNet forums provides a unique opportunity for personal and professional growth, whether you've got questions or comments, or just want to listen and learn from others.

Through SchoolNet's Online Educators' Forums, participants share advice and ideas, learn about new projects, discuss current issues and concerns, stay informed and network with educators from across Canada.

### Participating is as easy as 1,2,3!

1. Visit <http://autoreg.enoreo.on.ca/snappform.htm>
2. Register by quickly filling out and submitting the online form.
3. Return to the given URL within an hour to receive your username and password.

Now that you have your username and password, just login to SchoolNet's Online Educators' Forums ([www.enoreo.on.ca/schoolnet/forum/e/](http://www.enoreo.on.ca/schoolnet/forum/e/)) and enjoy!



## Linking Seniors and Youth

Looking for ideas on how to teach your students about the value and richness of Canada's senior citizens? If so, look into the Generations CanConnect program.

This program links seniors and youth in communities across Canada in a dialogue that explores, records and celebrates seniors' contributions to their country and their communities. By creatively using information and communication technologies and the power of the Information Highway, a digital archive of seniors' memories, experiences and personal treasures will be created and made accessible to all Canadians through the Generations CanConnect website.

Your class could receive \$300 for participating in Generations CanConnect, which includes a home page, an introduction, and a minimum of 25 profiles of seniors generated using provided templates. Youth first interview seniors in person then write profiles of a minimum of 150 words about a treasured object or a memorable event in the lives of seniors. With the use of multimedia technology, youth digitize both the stories and the photos, creating a searchable historical, cultural and educational resource on the Internet. Generations CanConnect will help Canadian seniors to be models and mentors to young Canadians while developing their own knowledge and skills using the Information Highway.

For all the details on how to participate in Generations CanConnect, visit <http://generations-canconnect.ic.gc.ca> today!







# choices & decisions

taking charge of your financial life™



## A Resource for Educating Today's Students and Consumers

Imagine a multi-media Educator's Kit that can be used to support a variety of curriculum areas such as:

- Business Studies
- Family Studies
- Guidance
- Career and life management
- Math
- Marketing

Imagine a flexible, modular educational kit on:

- Financial planning and budgeting
- Money management skills
- Setting goals and making choices
- Career planning and decision making

Imagine that this resource is FREE!

*Choices & Decisions: taking charge of your financial life* is ALL of the above.

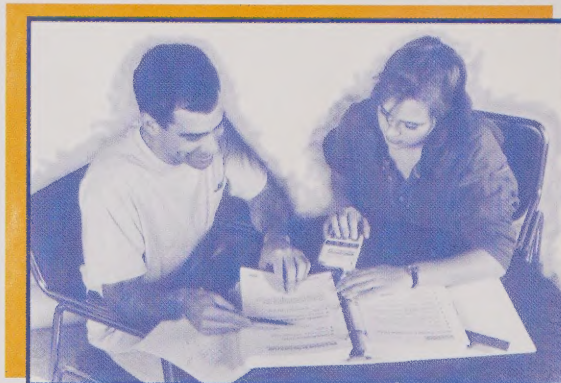
Designed in 1996 for Canadian high schools to teach money management skills to youth, this Educator's Kit has just been revised and updated. This easy-to-use, educator-ready resource has received very favourable response from students and teachers from all across Canada. Over 3000 copies of this resource have been distributed free, from St. John's to Whitehorse.

### An Educator's Kit with 14 Compelling Lessons

The kit consists of a Teacher's Guide and corresponding student materials in the Lesson Plans. The Teacher's Guide provides goals, objectives, teaching notes, suggested resources and web site addresses. The Lesson Plans provide overheads, quizzes and student activity worksheets which allow students to practice what they are learning in class.

This modular resource lets educators choose any or all of the lessons they believe would be most helpful for their students. The lessons require very little preparation, no special training, and can be used to support your curriculum needs.

*According to their teachers, the reaction of students who used the program were overwhelmingly positive – 64% reported positive reactions; 3% negative.*



### An Interactive CD-ROM That's Both Educational and Fun

The CD-ROM can be used as part of the Educator's Kit to reinforce the lessons taught and give students of all ages an engaging way to gain more practice. The CD-ROM can also be used independently to offer students and consumers an entertaining experience as a way to develop financial management skills.

The CD-ROM offers participants these learning experiences:

- **The Money Management Intelligence Game** teaches the art of budgeting and financial decision-making. Players solve the financial problems and help achieve money goals of six different characters or couples in real-life situations.

- **The Get Out of Debt Quiz Show** tests the player's knowledge of money matters. Game contestants start in debt, earn points with correct quiz answers, and try to get out of debt in this fun game.

- **Electronic Calculators** help the user evaluate credit cards, loans, retirement options, personal budgets, and even how to make a million dollars. The user can input his personal data into the calculator, save and print for future use.

*"A very well prepared resource ... a must for career and personal planning teachers".*

—Martin Runge, Quensel, BC

This kit is available free, courtesy of Visa Canada Association and is distributed by the Canadian Intramural Recreation Association. CIRA also distributes physical activity resources designed for use in the educational community.

# Free



To obtain your **free** copy of the educational kit:

1 - fax CIRA (613) 742-5467 and we'll fax you an order form

OR

2 - order through the CIRA Web site - [www.intramurals.ca](http://www.intramurals.ca)

- click on the C & D logo.

## CIRA C ACLI

CANADIAN INTRAMURAL RECREATION ASSOCIATION  
ASSOCIATION CANADIENNE DE LOISIRS INTRAMURAUX



# Symbol of Achievement



## The TD Canada Trust Scholarships for Outstanding Community Leadership

Most people would only see a hot dog cart.

But Jessica Taylor, now at the University of B.C., saw a way to provide employment for street youth. By borrowing a single hot dog cart, she led an initiative that created summer jobs for a dozen kids. That's just how Jessica sees things.

If you see things this way too, then we should talk. Each year TD Canada Trust is proud to honour exceptional high school students who saw problems in their communities and had the vision to solve them.

It is in this same spirit of community leadership that TD Canada Trust recognizes these extraordinary achievements and the spirit behind them by granting up to 20 TD Canada Trust Scholarships.

Each is valued at over \$50,000, and includes full tuition for up to four years at a Canadian university or college, \$3,500 a year for living expenses and guaranteed summer employment at TD Canada Trust during the years of study.

Plus up to 60 students will receive a \$500 Award of Merit.

Inspired leadership leads to extraordinary acts.

If you've made a difference in your community, we want to hear from you.

Visit your nearest TD Bank or Canada Trust branch, call 1-800-308-8306, or apply on-line at

[www.tdbank.ca/scholarship](http://www.tdbank.ca/scholarship)

Deadline for applications is October 31, 2000



**Canada Trust**